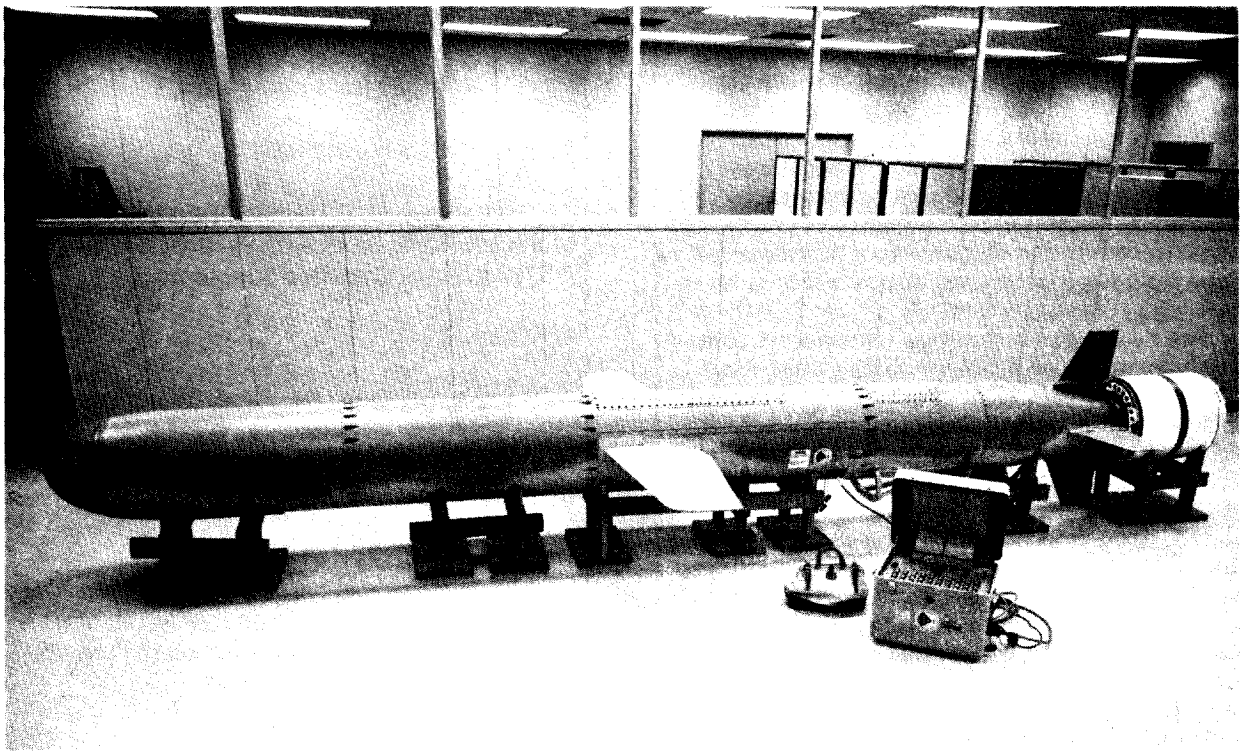

TOMAHAWK PRACTICAL EOD SYSTEM TRAINER (PEST) , DEVICE 12C2

TRAINING CATEGORY:

GUIDED MISSILE (Familiarization)

ORIGINATING AGENCY:

NAVSEA

SECURITY CLASSIFICATION:

Device 12C2 is unclassified.

TRAINER ACTIVATED:

Confidential when RSPs are being performed through instructor console microprocessor.

PURPOSE OF DEVICE:

To provide realistic training and practice in Render Safe Procedures (RSP) for US Navy Sea Launched Cruise Missiles (SLCM).

INTENDED USE:

At Naval Ordnance Station, Indian Head, MD, for outdoor in-the-field training of US Navy Explosive Ordnance Disposal (EOD) technicians in Render Safe Procedures.

FUNCTIONAL DESCRIPTION:

Device 12C2 is a fully functional and highly realistic 3-D mockup of a Sea Launch Cruise Missile (SLCM). The simulated missile contains a matrix of electronic sensing switches which sense the correct or incorrect actions of the trainees while performing Render Safe Procedures on the missile. The accompanying instructor Panel monitors these electronic sensors through the use of a microprocessor system.

The microprocessor is connected to the missile by an umbilical cable and is used to follow the trainees' progress through the RSP.

The external subassemblies of the missile, such as attachment rings, wings, fins, shroud, and booster motor are deployable or removable as appropriate. Access covers and recesses for pyrotechnic and Explosive Ordnance (EO) devices are removable. When removed, these covers reveal full relief, high fidelity mockups of the internal missile components.

The Instructor Panel displays each operation performed by the trainees. Selected omissions and/or incorrect trainee actions will cause visual and aural indications on the Instructor Panel. The Instructor Panel also contains provisions for connecting an external live explosive charge. When properly connected and with correct switch settings, this external explosive charge will be detonated in response to a trainee error that would have detonated the actual missile.

The device consists of two (2) separate components connected by an umbilical cable. Unit 1 is the simulated SLCM. It contains highly realistic mockups of RSP devices, pyrotechnics, warhead, and fuse components which are installed in the exact locations as their real counterparts in the actual missile. These internal components are shaped, sized, and fitted to cause the same obstructions and other simulation effects related to the RSP. Unit 2 is the Instructor Panel, which is built into a waterproof suitcase type of enclosure. It contains the main power switch, system test features, aural alarm, explosive charge controls and binding posts, and LEDs and switches for step-by-step indications of RSP steps.

PHYSICAL INFORMATION:

Number of Pieces: Two (2) Major,
Two (2) Minor

Sizes:
Unit 1 - 243.33" L x 20.5" D with 8'7.5" Wing Span
Unit 2 - 3.75" H x 12" D x 18" W
Protective Cover for Unit 2
Umbilical Cable - 30' L

Weight:
Unit 1 - 3,000 lbs. approx.
Unit 2 - 30 lbs. approx.
Protective Cover - 5 lbs. approx.
Umbilical Cable - 5 lbs. approx.

Total System - 3,040 lbs.

POWER REQUIREMENTS:

110 Volts, 60 Hz, Single Phase, 11 amps (Max)

PUBLICATIONS FURNISHED:

Tomahawk EOD Trainer Operations and Maintenance Manual with Parts Lists NTSC P-5200 (U) plus Classified Supplement (C)

PERSONNEL:

Instructor: One (1)Enlisted (PO/CPO) or Officer

Operator: Instructor- operated

Trainees: Class of up to TBD)

Maintenance Men: Organizational, one (1) day per week (4 hours PMS)

CONTRACT IDENTIFICATION:

Manufactured by General Dynamics Corp., San Diego, CA under NAVTRASYSCEN Contract No. N61339-84-C-0009.

LOCAL STOCK NUMBER:

6920-LL-C00-6033